

New species of the genus *Saliocleta* (Lepidoptera, Notodontidae) from Myanmar and Vietnam

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Abstract Two new species of *Saliocleta* (Notodontidae) are described from Myanmar and Vietnam: *S. yazakii* sp. nov. and *S. languida* sp. nov. A new combination, *Saliocleta armata* (Kiriakoff, 1974), is proposed for *Ceira armata* Kiriakoff, 1974.

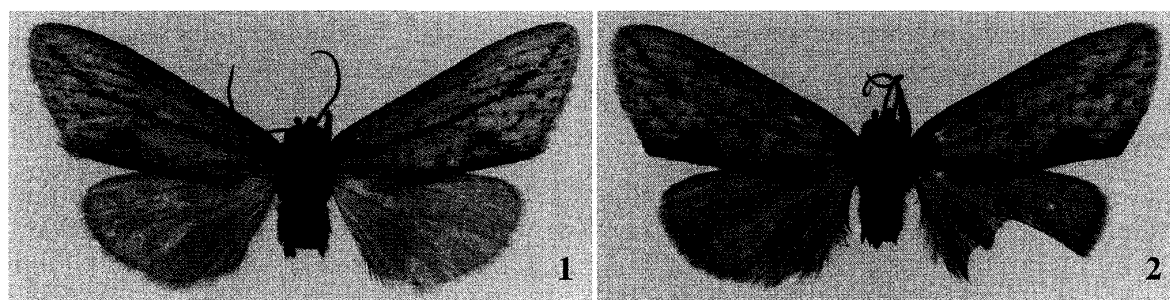
Key words *Saliocleta*, *Saliocleta yazakii*, *Saliocleta languida*, *Saliocleta armata*, *Ceira armata*, new combination.

Acronym. NSMT: National Science Museum, Tokyo.

BMNH: The Natural History Museum, London.

Ceria postica Moore, 1879 was described from Darjeeling, West Bengal, NE India. Schintlmeister and Fang (2001) illustrated the holotype of *C. postica*, transferring it to the genus *Saliocleta* Walker, 1863 (type species: *Saliocleta nonagrioides* Walker, 1862). Wu and Fang (2003) illustrated the genitalia of *S. postica* based on a specimen from Yunnan. We have found an interesting specimen from Myanmar, collected by Mr K. Yazaki, which is very similar to *Ceira postica* Moore. We follow their placement in *Saliocleta*, and describe the Myanmar specimen as a new species, *Saliocleta yazakii* sp. nov. Apart from this, we have found another *Saliocleta* specimen from Vietnam in the NSMT collection, which is also similar to *S. postica* and *S. yazakii*, but specifically separable. We describe this moth, also new to science, as *Saliocleta languida* sp. nov. In addition, the Sumatran species, *Ceira armata* Kiriakoff, 1974, is very similar to these three species in genitalia structure and external appearance, and we therefore propose the following new combination: *Saliocleta armata*, comb. nov.

Kiriakoff (1962) erected the monobasic subgenus *Biraia* under the genus *Bireta* basing it on the type species *Ceira postica* Moore, 1879. He later upgraded the subgenus *Biraia* to generic rank (Kiriakoff, 1968). Nakamura (1974) indicated that the genitalia Kiriakoff (1962, 1968) had illustrated were actually not those of *Ceira postica* Moore, 1879, but those of *Ceira junctura* Moore, 1879; our investigations show that this statement is correct.



Figs 1–2. *Saliocleta* spp. 1. *S. yazakii* sp. nov. Holotype, ♂. 2. *S. languida* sp. nov. Holotype, ♂.

Schintlmeister (1992) synonymised *Biraia* as a junior synonym of *Torigea* Matsumura, 1934, and proposed a new combination, *Torigea junctura* (Moore, 1879). This synonym is not recorded on the home page of the generic data bank of Lepidoptera on the BMNH website, so we mention it here in order to promote awareness of it.

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***Saliocleta yazakii* Kobayashi and Kishida, sp. nov. (Fig. 1)**

Male (Fig. 1). Wing span 35 mm. Forewing length 18 mm. Antenna lamellate with bristles. Labial palpi pale yellow, long, extending to the base of the antenna. Thorax straw-yellow. Forewing ground color straw-yellow, speckled brown. Dark brown fleck near tornus. Brown line running from apex to base, not angled at M_3 but rather smooth. Subterminal line with brown minute dot in every cell, not conspicuously black as in *S. postica*. Hindwing pale yellow, slightly deeper near inner side.

Male genitalia (Fig. 3). Uncus with apex round, flaps extending proximally to both sides caudad. When uncus is flattened in preparation it assumes the shape of a cap or a bell. Socii rod-like, elbowed near base. Valva simple with flat cucullus. Dorsal part of the juxta cap-like in ventral view. Aedeagus short, hooked. Vesica with a small diverticulum at distal end. Cornuti consisting of a line of several thorns.

The caudal part of the 8th sternite is made up with an arch in the distal part and thumb-like processes protruding inwards in the middle, giving the appearance of thumbs and finger-tips of both hands touching. The caudal margin of the 8th tergite is shaped like a wide shallow V, with a narrow central sclerotization.

Holotype. ♂, Myanmar, Kachin, Putao, Machanbow, 500 m, 13–14. vi. 1998, K. Yazaki leg. Genitalia slide No. HK855.

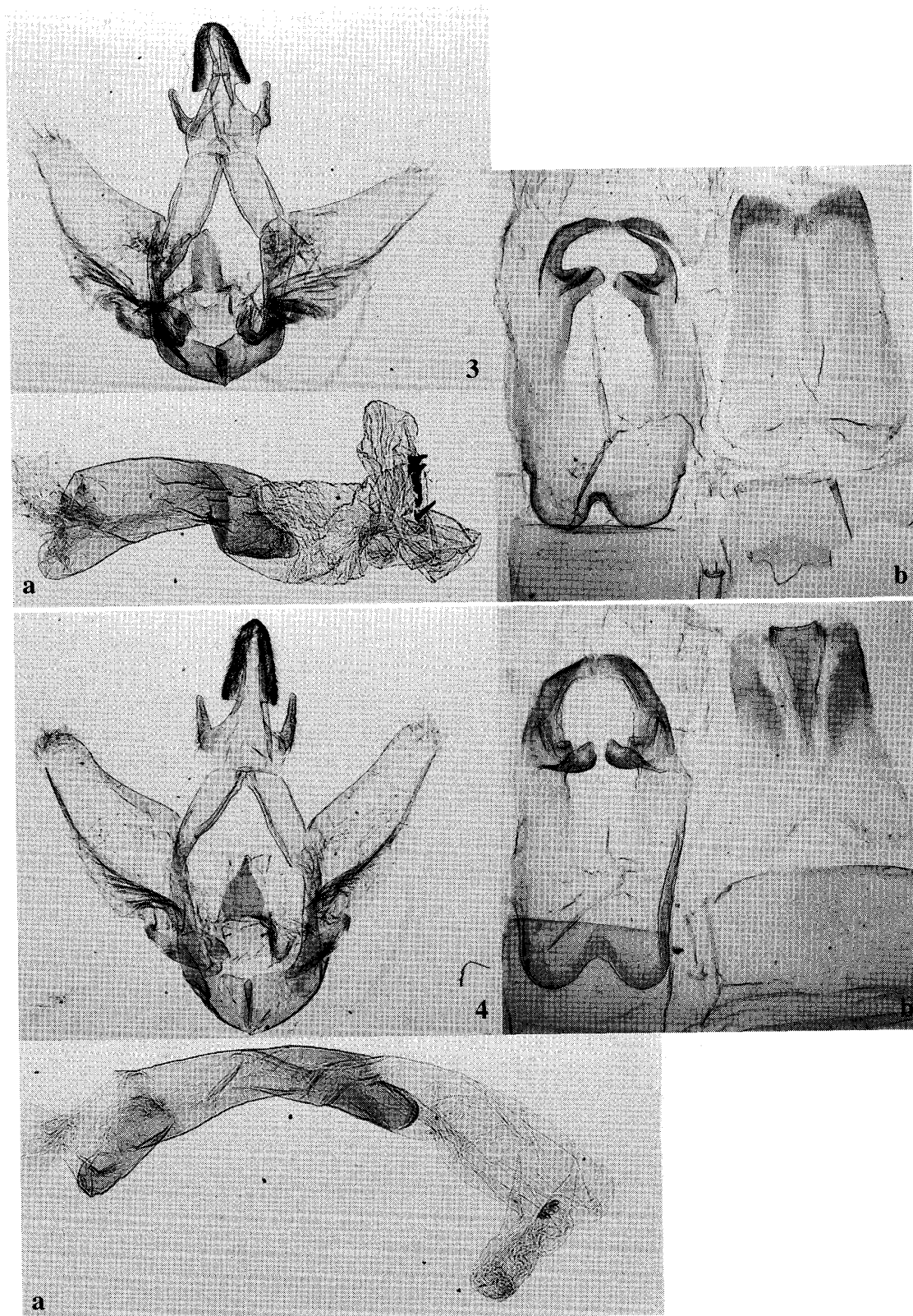
S. yazakii and *S. postica* are alike in the hindwing color, pale yellow. The simplest point for diagnosis is that *S. postica* has three distinct black dots on the subterminal line near the apex, which are lacking in *S. yazakii*. The difference of the distal-end shape of the aedeagus is also a good point for diagnosis.

Etymology. Mr Katsumi Yazaki captured the holotype during his collecting trip in Myanmar. The species name is dedicated to the great effort of Mr Yazaki.

***Saliocleta languida* Kobayashi and Kishida, sp. nov. (Fig. 2)**

Male (Fig. 2). Wing span 35 mm. Forewing length 18 mm. Antenna lamellate with bristles. Palpi pale yellow, extending to the base of the antenna. Thorax fuscous yellow. Forewing ground color yellow, speckled brown, darker than *S. yazakii*. Dark brown fleck near tornus. Brown line running from apex to base, but faint from M_3 , along Cu to the base. Subterminal line with black dot in every cell. Postmedial line with brown dot in every cell. Hindwing orange.

Male genitalia (Fig. 4). Uncus with round apex, flaps extending proximally to both sides caudad. When uncus is flattened in preparation, it assumes the shape of a bell, slenderer than in *S. yazakii*. Socii slenderer than in *S. yazakii*, rod-like, elbowed near base. Valva simple with round cucullus. Juxta water-drop like. Aedeagus straight, longer than that of *S. yazakii*, with end slightly protruding ventrad. Vesica with a line of several thorns weaker



Figs 3-4. Male genitalia of *Saliocleta* spp. 3. *S. yazakii* sp. nov. Holotype. 4. *S. languida* sp. nov. Holotype. (a: aedeagus, b: 8th sternite and 8th tergite).

than in *S. yazakii*.

The 8th sternite is similar to that of *S. yazakii*, but the small process at middle, which we term the thumb, is located farther from the caudal end compared to *S. yazakii*. The 8th tergite has a central Y-shaped part and weakly sclerotized fragment on both sides.

Holotype. ♂, Vietnam, Lam Dong, Bao Loc, 800 m, 10–17. x. 1999, K. Suzuki leg. Genitalia slide No. HK854.

S. languida has the oblique line from apex to base faint along the discoidal cell to the base, which separates it well from the other three. It has deep yellow hindwings and this color easily separates this species from *S. yazakii* and *S. postica*, and also *S. armata* from Sumatra. The specimen from Borneo which Holloway (1983) illustrated as *Ceira armata* has the hindwing color deep yellow like *S. languida*. The oblique line of the forewing is diagnostic as stated above. The 8th sternite and tergite of *S. languida* and *S. yazakii* are conspicuously different.

Etymology. The brown line running from apex to base is reduced to a faint line from discoidal-cell to base, and is diagnostic. *Languida* means faint, and is an adjective in the feminine gender, nominative singular.

***Saliocleta armata* (Kiriakoff, 1974), comb. nov.**

Ceira armata Kiriakoff, 1974: 383, pl. 2, fig. 1, text-fig. 7; Holloway, 1983: 44, figs 42, 42a (♂ genitalia), pl. 4, fig. 4 (imago); Bender, 1985: 46, pl. 4, fig. 18.

The type locality of *S. armata* is Sumatra. The genitalia are clearly different from those of *Ceira metaphaea* Walker, the type species of the genus *Ceira*, which was synonymized with *Armiana* by Schintlmeister (2003). The external appearance and genitalic structure of *C. armata* are basically similar to *S. postica* and the two new species described here. We therefore include it in the genus *Saliocleta*. The hindwing color is pale yellow as in *S. yazakii*, but genitalic features differ in that, according to Kiriakoff (1974), in *S. armata*, the distal portion of the valva is narrowly extended and the hook of the aedeagus at the distal end is beaked.

Holloway (1983) illustrated a specimen from Borneo as *Ceira armata*, which has the hindwing color deep yellow like *S. languida*. The shape of the distal portion of the valva is pointed and the spine at the end of the aedeagus is thin and pointed. These features are slightly different from the original description of *Ceira armata* Kiriakoff, 1974 and noticeably different from *S. languida*, *S. yazakii* and *S. postica*.

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References

- Bender, R., 1985. Notodontidae von Sumatra. *Heterocera sumatr.* **5**: 9–125, pls 1–2, 1–14.
- Gaede, M., 1930. Notodontidae. In Seitz, A. (Ed.), *Die Gross-Schmetterlinge der Erde* **10**: 607–655, pls 79–84. A. Kernen, Stuttgart.
- Holloway, J. D., 1983. The moths of Borneo: family Notodontidae. *Malay. Nat. J.* **37**: 1–107.
- Kiriakoff, S. G., 1962. Notes sur les Notodontidae (Lepidoptera) *Pydona* Walker et genres voisins. *Bull.*

- Annls Soc. R. ent. Belg.* **98**: 149–214, pls 1–6.
- , 1968. Notodontidae. Genera Indo-Australica. In Wytzman, P. (Ed.), *Genera Insectorum* **217C**. 269 pp., 11 pls. Kraainem, Belgium.
- , 1974. Neue und wenig bekkante asiatische Notodontidae (Lepidoptera). *Veröff. Zool. Staatssamml. München* **17**: 371–421, pls 1–5.
- Moore, F., 1879. Descriptions of Indian Lepidoptera Heterocera from the collection of the late Mr. W. S. Atkinson. In Hewitson, W. C. & F. Moore, *Descriptions of new Indian lepidopterous Insects from the Collection of the late Mr. W. S. Atkinson* **1**: 5–88, pls 2–3.
- Nakamura, M., 1974. Notodontidae of eastern Nepal based on the collection of the society of Japan in 1963 (Lepidoptera). *Tyô Ga* **25**: 115–129.
- Schintlmeister, A., 1992. Die Zahnspinner Chinas (Lepidoptera, Notodontidae). *Nach. ent. Ver. Apollo* (Suppl. **11**): 1–343.
- Schintlmeister, A. & C. L. Fang, 2001. New and less known Notodontidae from mainland China (Insecta, Lepidoptera, Notodontidae). *Neue ent. Nachr.* **50**: 1–143.
- Wu, C. S. & C. L. Fang, 2003. Lepidoptera: Notodontidae. *Fauna sinica* (Insecta) **31**. xxvii, 952 pp., 8 pls. Beijing.

摘 要

ミャンマーとベトナムから *Saliocteta* 属 2 新種の記載 (小林秀紀・岸田泰則)

ミャンマーから *Saliocteta yazakii* sp. nov., ベトナムから *Saliocteta languida* sp. nov. を記載し、スマトラから記載された *Ceira armata* Kiriakoff, 1974 を *Saliocteta* へ移して *Saliocteta armata* (Kiriakoff, 1974), comb. nov. とした。

2 新種はダージリンから記載された *Ceira postica* Moore, 1879 と同属である。Kiriakoff (1968) は *Ceira postica* を属 *Biraia* へ入れている。しかし、ここに示された genitalia は実際には *Ceira junctura* Moore, 1879 であった (Nakamura, 1974)。Schintlmeister & Fang (2001) は *Ceira postica* の holotype を写真表示してこれを *Saliocteta* へ属するとしている。また、Wu & Fang (2003) に示されている雲南の *S. postica* の genitalia は、新記載の 2 種及び *Ceira armata* Kiriakoff, 1974 の genitalia と基本構造が同じで、これを見ると 4 種は明らかに同属である。これらは *Saliocteta* の type species の *Saliocteta nonagrioides* Walker, 1862 と外見は違うが、確かに genitalia は遠くはない。故にここではこの 4 種の属を *Saliocteta* とし、*Ceira armata* Kiriakoff, 1974 を *Saliocteta* へ移す。

これら 4 種はいずれも翅形、色彩、斑紋は似ている。Genitalia では valva 遠位端, fultura inferior, aedeagus 尾端の形の違いでこれら 4 種ははっきり分かれる。*S. languida* では後翅の色が橙色で、また前翅翅頂から基部へ走る茶色の線が中室から基部までは淡く弱いのが特徴的である。*S. yazakii* では亜外縁線は小さく淡い茶色の点で構成されているが、*S. postica* では黒いはっきりした点が認められる。また、*S. languida* と *S. yazakii* では第 8 腹板、第 8 背板の違いが明らかである。*S. armata* の原記載地はスマトラであるが、Holloway はボルネオからの標本を提示している。これは、外見、genitalia とともにスマトラのものと若干の違いがあり、また新記載の 2 種とも違う。原産地スマトラのものは後翅も薄い黄色で、*S. postica* や *S. yazakii* に似ている。ボルネオのものは後翅が *S. languida* のごとく橙色であるが、斜線が翅頂から基部まではっきりしている点で区別できる。

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